

OGDEN ARSENAL, IGLOO TYPE MAGAZINE

(OGDEN ARSENAL, BUILDING 1392)

(OGDEN ARSENAL, BUILDING 392)

(OGDEN ARSENAL, MUNITIONS STORAGE IGLOO)

East side of Spruce Lane, South of Georgia Street

Layton Vicinity

Davis County

Utah

HAER No. UT-84-X

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD

Rocky Mountain System Support Office

National Park Service

P.O. Box 25287

Denver, Colorado 80225-0287

## HISTORIC AMERICAN ENGINEERING RECORD

OGDEN ARSENAL, IGLOO TYPE MAGAZINE  
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**Location:** East side of Spruce Lane, south of Georgia Street, Hill Air Force Base, Layton Vicinity, Davis County, Utah

**UTM:** 12-417000-4553510

**Date of Construction:** 1938

**Architect:** Unknown

**Builder:** Unknown

**Present Owner:** Hill Air Force Base

**Present Use:** Munitions Storage

**Significance:** Building 1392 provides particularly vivid insight into the processes involved in the storage of highly explosive components like munitions. In addition, this building contributes to an understanding of the U.S. Army build-up which occurred on the eve of and during World War II.

**History:** The introduction of various types of ammunition manufacture at Ogden Arsenal during World War II necessitated the construction of many new buildings which took various forms as related to their specific functions within the overall manufacture and storage processes. Building 1392 was constructed in 1938 as part of the WPA Arsenal reconstruction after a 1927 windstorm destroyed most of the original Arsenal buildings. It may have stored 100 pound TNT/Amatol bombs that were produced in the Bomb Loading Plant at Ogden Arsenal.

Igloo Type Magazines such as Building 1392 stored ordnance material and were designed to minimize damage to additional buildings in the event of explosions. The igloo is covered with an earthen mound and separated from surrounding buildings by open land. A concrete apron with a sharp slope upward from the entry made fork lift operations outside igloos like Building 1392 a difficult task, so all ordnance material was loaded by hand until 1943. That year, a process was developed that kept automatic electric fork lift trucks with combination forks inside the igloos while a conveyor track was laid from rail cars or trucks into the doorway. Both small arms ammunition and bombs were handled in this way, which saved approximately one half the time previously used by hand loading alone, with half as many workers.

Building 1392 is identical in to several other buildings on the base. There are thirty-three examples: Buildings 1370-1373, 1381-1389, 1391-1394, 1470, 1472-1475, 1480-1482, 1485-1488, and 1491-1494. Electrical wiring and lights were added to these buildings during World War II.

#### **General**

**Description:** Building 1392 (29'-2" x 41'-10") is an example of a Truncated Trapezoidal Igloo, located in the western edge of the main igloo storage area, originally known as the Magazine Storage and Warehouse Area. This type of igloo consists of a single double door entry, set on a truncated trapezoidal wall which tapers back into an earth mound. The floor, walls, and roof are of reinforced concrete with three of its sides covered with mounded earth. The entry features an explosion-proof door with a mitered top edge. The concrete door frame protrudes slightly from the face of the wall, with the top two edges of the frame slightly overhanging the vertical pieces. A metal vent rises through the earthen mound from the igloo at the east end of the building.